

ABSTRACT OF THE DISCLOSURE

A spark plug having a center electrode assembly that includes a center electrode and precious metal insert that is both mechanically interlocked and welded to the center electrode in a manner that permits trapped gases to escape from between the two components. Also disclosed is a method for manufacturing the same. During assembly, the precious metal insert is placed into a blind hole that extends axially into a lower end of the center electrode. Once in place, the center electrode is deformed around an enlarged head section of the insert to mechanically interlock the two components together. To further strengthen this attachment, the two components are welded together about their circumference. In one embodiment, the weld includes several interruptions that function as vapor vents for any gases that may be trapped. In other embodiments, a radially or an axially-extending vent hole is used in lieu of the weld interruptions.